



The Effect Of Sleep Quality On Psychological Well-Being Among Adults

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Abstract

This research study explores the relationship between sleep quality and overall well-being among adults. Sleep is essential for both mental and physical health. While we know that sleep is important, the specific ways it affects individual well-being are still being researched. The research sample consisted of 105 adults and were selected using random sampling method. All the participant were assessed using the Pittsburgh Sleep Quality Index (PSQI) and the General Health Questionnaire (GHQ-12). Proper statistical treatment was applied to obtain the result. The study found a strong relationship between sleep quality and overall well-being. These findings emphasize the importance of prioritizing sleep quality as a key factor in promoting holistic health in adults.

Keywords: sleep quality, nutrition, well-being, adults

Introduction:

Sleep Quality:

Sleep quality is a crucial aspect of human health and well-being, influencing various physical and mental health outcomes. It encompasses several factors, including the duration of sleep, how restful it is, and the frequency of disturbances during the night. High-quality sleep is essential for optimal cognitive functioning, emotional regulation, and overall physical health. Research indicates that individuals who experience good sleep quality are more likely to report higher levels of happiness and lower levels of stress and anxiety (Hirshkowitz et al., 2015; Walker, 2017). In contrast, poor sleep quality can lead to a range of negative consequences. For instance, insufficient or disrupted sleep has been linked to increased risks of mental health disorders such as depression and anxiety, as well as chronic physical conditions like obesity, diabetes, and cardiovascular disease.

As people age, their sleep patterns often change, with many experiencing a decline in sleep quality due to various factors such as hormonal changes, medical conditions, and lifestyle choices (Hirshkowitz et al., 2015). Additionally, external factors such as stress from work or personal life can further disrupt sleep. Understanding the importance of sleep quality is essential for developing effective interventions aimed at improving health and well-being across different populations. By focusing on sleep quality, we can better understand its role in enhancing overall life satisfaction.

Psychological Well-Being:

Psychological well-being encompasses an individual's emotional and mental state, including aspects such as life satisfaction, stress management, resilience, and overall happiness. It is influenced by various factors including social relationships, physical health status, and lifestyle choices like sleep quality and nutrition. Research shows that individuals with higher levels of psychological well-being tend to enjoy better physical health outcomes; they often have stronger immune systems and lower rates of chronic illness (Ryff & Keyes, 1995; Diener et al., 2009).

As individuals age, maintaining psychological well-being becomes increasingly important for leading a fulfilling life. The challenges associated with aging—such as loss of loved ones or declining health—can significantly impact mental health. Therefore, understanding the factors that contribute to psychological well-being across different age groups is essential for promoting healthier aging. Interventions aimed at improving sleep quality may also play a critical role in enhancing psychological well-being.

Significance of the Study

This study focuses on the critical role of sleep quality in enhancing overall well-being among individuals. Sleep quality refers to an individual's satisfaction with their sleep experience, encompassing factors such as sleep duration, efficiency, and disturbances. Understanding sleep quality is vital because it significantly impacts mental and physical health across various age groups. For instance, children and adolescents require more sleep for growth and development, while adults need quality rest to maintain cognitive function and emotional balance. Poor sleep can lead to a range of issues, including anxiety, depression, and decreased productivity.

The importance of this study lies in its potential to inform interventions aimed at improving sleep quality, which can lead to better health outcomes. By highlighting the connection between sleep and well-being, the research underscores the need for effective strategies to promote healthy sleep habits. Additionally, addressing sleep quality can help mitigate the broader societal impacts of sleep deprivation, such as increased healthcare costs and reduced workplace productivity. Ultimately, understanding and improving sleep quality is essential for fostering a healthier population and enhancing overall life satisfaction.

Statement of the Problem:

This study aims to explore the relationship between sleep quality, dietary habits, and well-being in adults.

Objective of the study:

This study investigates how sleep quality and nutrition impact psychological well-being in adults.

Hypothesis:

There is a positive correlation between sleep quality and psychological well-being among adults.

Sampling:

To study the relationship between sleep quality and psychological well-being, we used a random sampling method to select participants. Our target population included 105 adults (age range 18 to 70) living in urban and rural areas of Maharashtra. By choosing participants randomly, we aimed to reduce bias and ensure our sample represents the diverse adult population in these regions. This method will help us make general conclusions about how sleep and nutrition affect mental health among adults in Maharashtra. Random sampling also minimizes the influence of other factors on our results, leading to more reliable findings about these relationships.

Tools:

Sleep Quality Assessment:

Sleep quality was assessed using the Pittsburgh Sleep Quality Index (PSQI), developed by Dr. Daniel Buysse and his colleagues at the University of Pittsburgh in 1989. This self-report questionnaire evaluates sleep quality and disturbances over the past month with 19 questions covering different aspects of sleep, such as duration and disturbances. Each item is rated on a 0 to 3 scale, with higher scores indicating poorer sleep quality. The PSQI has shown good reliability, with internal consistency (Cronbach's alpha) ranging from 0.70 to 0.85, meaning the questions work well together. It also has moderate test-retest reliability, with scores remaining stable over time.

Well-Being Assessment:

Well-being was evaluated using the General Health Questionnaire (GHQ-12), created by David Goldberg. This screening tool includes 12 questions that assess symptoms of anxiety and depression over the past few weeks. Respondents rate their experiences on a four-point Likert scale, providing insights into their overall well-being. The GHQ-12 is considered reliable, with Cronbach's alpha values typically above 0.80, indicating that it effectively measures well-being symptoms.

Procedure

Data for this study were collected from various sources. Primary data was gathered from 82 adults aged 18 to 65, consisting of 38 male and 44 female participants, focusing on sleep quality and psychological well-being. Participants completed two questionnaires: the Pittsburgh Sleep Quality Index (PSQI) to assess sleep quality and the General Health Questionnaire (GHQ-12) to measure psychological well-being. The primary method of data collection was through online surveys distributed via Google Forms.

The study employed a cross-sectional research design to explore the correlation between sleep quality and psychological well-being. Initially, the research area was defined, and the objectives were established. A review of existing literature on both variables was conducted to inform the study.

Statistical analyses, including mean, standard deviation, and correlation coefficients, were performed using SPSS software. The study concludes with a discussion of findings, limitations, and references.

Results and discussion

Table 1. Descriptive Statistics

Statistics	Sleep Quality	Well-being
Valid (N)	82	82
mean	7.09	14.52
Std. deviation	2.640	6.025

Table 1 provides the statistics for Sleep Quality and Well-being based on 82 valid responses. The mean score for Sleep Quality is 7.09, indicating that on average, participants rated their sleep quality at this level. For Well-being, the mean score is 14.52, suggesting that participants generally reported moderate levels of well-being. The standard deviation reflects the variation in the responses. For Sleep Quality, the standard deviation is 2.640, meaning that most participants' scores fall within a range of 2.640 points from the average. In contrast, the standard deviation for Well-being is 6.025, showing a wider spread in the responses, indicating greater variability in how participants rated their well-being.

Table 2. Correlation

Variable	Sleep quality	Well-being	p-value
Sleep quality	1	.451**	<.001
Well-being	.451**	1	<.001

**. Correlation is significant at the 0.01 level (2-tailed).

The Pearson product-moment correlation coefficient (Pearson's correlation, for short) is a statistical measure used to determine the strength and direction of the relationship between two variables measured on at least an interval scale. The correlation coefficient, denoted as r , ranges from -1 to +1. A positive correlation ($r > 0$) indicates that as one variable increases, the other also increases, while a negative correlation ($r < 0$) means that as one variable increases, the other decreases. A value of 0 indicates no correlation between the variables.

The table 2. show a significant positive correlation between Sleep Quality and Well-Being, with a Pearson correlation value of $r = .451$. The significance value ($p < .001$) indicates that this relationship is statistically significant at the 0.01 level (2-tailed). This means that the likelihood of this result occurring by chance is

very low, confirming a reliable and meaningful relationship. Therefore, as Sleep Quality improves, Well-Being also tends to improve.

These findings align with previous research that emphasizes the importance of sleep quality for overall well-being. Adequate, high-quality sleep is essential for mental and physical health, and individuals who experience better sleep tend to report higher levels of life satisfaction, emotional stability, and overall wellness. Conversely, poor sleep quality may lead to lower well-being, increased stress, and difficulties in coping with daily challenges. This positive correlation highlights the critical role of sleep in maintaining well-being and suggests that improving sleep quality could lead to better mental health outcomes.

These results provide evidence for the hypothesis that Sleep Quality and Well-Being are positively correlated. Future interventions focusing on enhancing sleep quality—such as stress reduction techniques, sleep hygiene education, and relaxation strategies may play a vital role in improving overall well-being.

Conclusion:

In short, the research hypothesis was tested, and the results were obtained. A significant positive correlation was observed between Sleep Quality and Well-Being, indicating that as Sleep Quality improves, Well-Being also tends to improve.

Limitation:

1. The research study had a small number of participants. There were more female participants than male, which might have affected the results related to the study variables.
2. Geographical limitations were faced during data collection. This resulted in limited resources being used to collect data.
3. Data was collected online through a Google form. While this helped reach more people, many ignored the form or didn't think the study was important, leading to fewer responses.
4. Some participants might have answered in a way they thought the researcher expected, known as expectancy bias.

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